

1656

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,361

DATE: 11/05/2001

TIME: 11:21:31

Input Set : A:\es.txt

Output Set: N:\CRF3\11052001\I782361.raw

3 <110> APPLICANT: Hu, Yu-Wen
 5 <120> TITLE OF INVENTION: PRIMER-SPECIFIC AND MISPAIR EXTENSION ASSAY FOR IDENTIFYING
 GENE
 6 VARIATION
 8 <130> FILE REFERENCE: 2883-4757US
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/782,361
 C--> 10 <141> CURRENT FILING DATE: 2001-02-13
 10 <160> NUMBER OF SEQ ID NOS: 49
 12 <170> SOFTWARE: PatentIn version 3.0
 14 <210> SEQ ID NO: 1
 15 <211> LENGTH: 25
 16 <212> TYPE: DNA
 C--> 17 <213> ORGANISM: Artificial
 19 <220> FEATURE:
 20 <223> OTHER INFORMATION: sense universal primer for PCR (first round)
 22 <400> SEQUENCE: 1
 23 ctcccctgtg aggaactact gtctt 25
 26 <210> SEQ ID NO: 2
 27 <211> LENGTH: 20
 28 <212> TYPE: DNA
 C--> 29 <213> ORGANISM: Artificial
 31 <220> FEATURE:
 32 <223> OTHER INFORMATION: antisense universal primer for PCR (first round)
 34 <400> SEQUENCE: 2
 35 ctcgcaagca ccctatcagg 20
 38 <210> SEQ ID NO: 3
 39 <211> LENGTH: 31
 40 <212> TYPE: DNA
 C--> 41 <213> ORGANISM: Artificial
 43 <220> FEATURE:
 44 <223> OTHER INFORMATION: sense universal primer for PCR (second round)
 46 <400> SEQUENCE: 3
 47 ccatagtgggt ctgcggaacc ggtgagtaca c 31
 50 <210> SEQ ID NO: 4
 51 <211> LENGTH: 18
 52 <212> TYPE: DNA
 C--> 53 <213> ORGANISM: Artificial
 55 <220> FEATURE:
 56 <223> OTHER INFORMATION: antisense universal primer for PCR (second round)
 58 <400> SEQUENCE: 4
 59 cccaacacta ctcggcta 18
 62 <210> SEQ ID NO: 5
 63 <211> LENGTH: 21
 64 <212> TYPE: DNA
 C--> 65 <213> ORGANISM: Artificial
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: primer for PSMEA
 70 <400> SEQUENCE: 5

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,361

DATE: 11/05/2001

TIME: 11:21:31

Input Set : A:\es.txt

Output Set: N:\CRF3\11052001\I782361.raw

```

71 ctcaatgcct ggagatttgg g 21
74 <210> SEQ ID NO: 6
75 <211> LENGTH: 20
76 <212> TYPE: DNA
C--> 77 <213> ORGANISM: Artificial
79 <220> FEATURE:
80 <223> OTHER INFORMATION: primer for PSMEA
82 <400> SEQUENCE: 6
83 caccggaatt gccaggacga 20
86 <210> SEQ ID NO: 7
87 <211> LENGTH: 21
88 <212> TYPE: DNA
C--> 89 <213> ORGANISM: Artificial
91 <220> FEATURE:
92 <223> OTHER INFORMATION: primer for PSMEA
94 <400> SEQUENCE: 7
95 acactactcg gctagcagtc t 21
98 <210> SEQ ID NO: 8
99 <211> LENGTH: 21
100 <212> TYPE: DNA
C--> 101 <213> ORGANISM: Artificial
103 <220> FEATURE:
104 <223> OTHER INFORMATION: primer for PSMEA
106 <400> SEQUENCE: 8
107 ccactctatg cccggtcatt t 21
110 <210> SEQ ID NO: 9
111 <211> LENGTH: 21
112 <212> TYPE: DNA
C--> 113 <213> ORGANISM: Artificial
115 <220> FEATURE:
116 <223> OTHER INFORMATION: primer for PSMEA
118 <400> SEQUENCE: 9
119 tatgtccggt catttgggca c 21
122 <210> SEQ ID NO: 10
123 <211> LENGTH: 21
124 <212> TYPE: DNA
C--> 125 <213> ORGANISM: Artificial
127 <220> FEATURE:
128 <223> OTHER INFORMATION: primer for PSMEA
130 <400> SEQUENCE: 10
131 cactctgtgc ccggccatth g 21
134 <210> SEQ ID NO: 11
135 <211> LENGTH: 19
136 <212> TYPE: DNA
C--> 137 <213> ORGANISM: Artificial
139 <220> FEATURE:
140 <223> OTHER INFORMATION: primer for PSMEA
142 <400> SEQUENCE: 11
143 accggaatcg ctgggggtga 19

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,361

DATE: 11/05/2001

TIME: 11:21:31

Input Set : A:\es.txt

Output Set: N:\CRF3\11052001\I782361.raw

```

146 <210> SEQ ID NO: 12
147 <211> LENGTH: 19
148 <212> TYPE: DNA
C--> 149 <213> ORGANISM: Artificial
151 <220> FEATURE:
152 <223> OTHER INFORMATION: primer for PSMEA
154 <400> SEQUENCE: 12
155 accggaatcg ccgggatga 19
158 <210> SEQ ID NO: 13
159 <211> LENGTH: 21
160 <212> TYPE: DNA
C--> 161 <213> ORGANISM: Artificial
163 <220> FEATURE:
164 <223> OTHER INFORMATION: primer for PSMEA
166 <400> SEQUENCE: 13
167 cactactcgg ctagtgatct c 21
170 <210> SEQ ID NO: 14
171 <211> LENGTH: 19
172 <212> TYPE: DNA
C--> 173 <213> ORGANISM: Artificial
175 <220> FEATURE:
176 <223> OTHER INFORMATION: primer for PSMEA
178 <400> SEQUENCE: 14
179 gggggtcctg gaggtgtt 19
182 <210> SEQ ID NO: 15
183 <211> LENGTH: 22
184 <212> TYPE: DNA
C--> 185 <213> ORGANISM: Artificial
187 <220> FEATURE:
188 <223> OTHER INFORMATION: primer for PSMEA
190 <400> SEQUENCE: 15
191 cattgagcgg gtttgatcca at 22
194 <210> SEQ ID NO: 16
195 <211> LENGTH: 12
196 <212> TYPE: DNA
C--> 197 <213> ORGANISM: Artificial
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Extension product of wild-type HIV-1
202 <400> SEQUENCE: 16
203 agtccacatc ct 12
206 <210> SEQ ID NO: 17
207 <211> LENGTH: 12
208 <212> TYPE: DNA
C--> 209 <213> ORGANISM: Artificial
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Extension product of wild-type HIV-1
214 <400> SEQUENCE: 17
215 cgtccacatc ct 12
218 <210> SEQ ID NO: 18

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,361

DATE: 11/05/2001

TIME: 11:21:31

Input Set : A:\es.txt

Output Set: N:\CRF3\11052001\I782361.raw

```

219 <211> LENGTH: 41
220 <212> TYPE: DNA
C--> 221 <213> ORGANISM: Artificial
223 <220> FEATURE:
224 <223> OTHER INFORMATION: L63 + primer sequences
226 <220> FEATURE:
227 <221> NAME/KEY: misc_feature
228 <222> LOCATION: (32)..(32)
229 <223> OTHER INFORMATION: n can be any nucleotide
232 <220> FEATURE:
233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (41)..(41)
235 <223> OTHER INFORMATION: n can be any nucleotide
238 <400> SEQUENCE: 18
W--> 239 gctttatgtc cacagatttc tatgagtacc tnatcatact n 41
242 <210> SEQ ID NO: 19
243 <211> LENGTH: 44
244 <212> TYPE: DNA
C--> 245 <213> ORGANISM: Artificial
247 <220> FEATURE:
248 <223> OTHER INFORMATION: L63P + primer sequences
250 <400> SEQUENCE: 19
251 agacagtatg atcaggtact catagaaatc tgtggacata aagc 44
254 <210> SEQ ID NO: 20
255 <211> LENGTH: 26
256 <212> TYPE: DNA
C--> 257 <213> ORGANISM: Artificial
259 <220> FEATURE:
260 <223> OTHER INFORMATION: pro63L(G)-R
262 <400> SEQUENCE: 20
263 gctttatgtc cacagatttc tatgag 26
266 <210> SEQ ID NO: 21
267 <211> LENGTH: 44
268 <212> TYPE: DNA
C--> 269 <213> ORGANISM: Artificial
271 <220> FEATURE:
272 <223> OTHER INFORMATION: L63P + primer sequences
274 <400> SEQUENCE: 21
275 agacagtatg atcaggtacc catagaaatc tgtggacata aagc 44
278 <210> SEQ ID NO: 22
279 <211> LENGTH: 41
280 <212> TYPE: DNA
C--> 281 <213> ORGANISM: Artificial
283 <220> FEATURE:
284 <223> OTHER INFORMATION: L63 + primer sequences
286 <220> FEATURE:
287 <221> NAME/KEY: misc_feature
288 <222> LOCATION: (32)..(41)
289 <223> OTHER INFORMATION: n can be any nucleotide

```

RAW SEQUENCE LISTING

DATE: 11/05/2001

PATENT APPLICATION: US/09/782,361

TIME: 11:21:31

Input Set : A:\es.txt

Output Set: N:\CRF3\11052001\I782361.raw

```

292 <400> SEQUENCE: 22
W--> 293 gctttatgtc cacagatttc tatgggtacc tnatcatact n 41
296 <210> SEQ ID NO: 23
297 <211> LENGTH: 26
298 <212> TYPE: DNA
C--> 299 <213> ORGANISM: Artificial
301 <220> FEATURE:
302 <223> OTHER INFORMATION: PRO90L-R
304 <400> SEQUENCE: 23
305 gctttatgtc cacagatttc tatggg 26
308 <210> SEQ ID NO: 24
309 <211> LENGTH: 33
310 <212> TYPE: DNA
C--> 311 <213> ORGANISM: Artificial
313 <220> FEATURE:
314 <223> OTHER INFORMATION: L90
316 <220> FEATURE:
317 <221> NAME/KEY: misc_feature
318 <222> LOCATION: (32)..(33)
319 <223> OTHER INFORMATION: n can be any nucleotide
322 <400> SEQUENCE: 24
W--> 323 atttaaagtg caaccaatct gagtcttcag ann 33
326 <210> SEQ ID NO: 25
327 <211> LENGTH: 33
328 <212> TYPE: DNA
C--> 329 <213> ORGANISM: Artificial
331 <220> FEATURE:
332 <223> OTHER INFORMATION: L90
334 <400> SEQUENCE: 25
335 aatctgaaga ctcagattgg ttgcacttta aat 33
338 <210> SEQ ID NO: 26
339 <211> LENGTH: 27
340 <212> TYPE: DNA
C--> 341 <213> ORGANISM: Artificial
343 <220> FEATURE:
344 <223> OTHER INFORMATION: PRO90L-R
346 <400> SEQUENCE: 26
347 atttaaagtg caaccaatct gagtctt 27
350 <210> SEQ ID NO: 27
351 <211> LENGTH: 33
352 <212> TYPE: DNA
C--> 353 <213> ORGANISM: Artificial
355 <220> FEATURE:
356 <223> OTHER INFORMATION: L90M
358 <400> SEQUENCE: 27
359 aatctgatga ctcagattgg ttgcacttta aat 33
362 <210> SEQ ID NO: 28
363 <211> LENGTH: 38
364 <212> TYPE: DNA

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/782,361

DATE: 11/05/2001

TIME: 11:21:32

Input Set : A:\es.txt

Output Set: N:\CRF3\11052001\I782361.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:17 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:29 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:41 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:53 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:65 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:77 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:89 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:101 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:113 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:125 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:137 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:149 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:161 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:173 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:185 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:197 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
L:209 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:221 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:245 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19
L:257 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20
L:269 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21
L:281 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:299 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23
L:311 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24
L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:329 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:25
L:341 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:26
L:353 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:27
L:365 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:28
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:383 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:29
L:395 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:30
L:407 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:31
L:419 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:32
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:437 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:33
L:491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:525 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40
L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47